

REMARKS

This amendment is in response to the Examiner's Official Action mailed March 26, 2003. Claims 1-14 were pending, and Claims 1-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Tanaka et al* (US Patent 5,535,317) in view of *Karl Jeacle* (Karl Jeacle's Mortage Calculator).

By the present response, Claims 1-14 remain unchanged.

Response to the Examiner's Rejections under 35 USC 103(a)

The Examiner rejected Claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over *Tanaka et al* in view of *Jeacle*. Applicants respectfully traverse.

Applicants submit that to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest *all* of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicants' disclosure.

After having carefully reviewed the *Tanaka* and *Jeacle* references, Applicants submit that each of the claims of the present application includes at least one limitation which is not taught or suggested in either *Tanaka* or *Jeacle*, irrespective of whether these references are considered alone or in combination. Accordingly, Applicants submit that the *Tanaka* and the *Jeacle* references can not render the claims of the present application obvious.

Regarding claim 1, the examiner has cited the *Jeacle* reference as teaching "simultaneously displaying a numerical table and graphical representation, and both are interrelated upon the other, which graph are immediately modified by inputting different values in table". However, the numerical table

to which the examiner has referred is not a table which is representative of a mathematical equation. Indeed, after carefully reviewing the *Jeacle* mortgage calculator, Applicants submit that the numerical table to which the examiner has referred does not provide "a numerical representation of the defined mathematical equation in the form of a table of values" as recited in claim 1 of the present application.

Instead, the numerical table used in the *Jeacle* reference contains values which are used by a mathematical equation. The mathematical equation which uses these values is not displayed in any form other than a graphical representation. Accordingly, *Jeacle* clearly does not teach or suggest "...simultaneously displaying two of multiple representations of the mathematical equation...and updating the other displayed representation in accordance with the manipulation of the graphical representation" (claim 1).

In view of the foregoing, Applicants submit that claim 1 defines patentable subject matter and therefore is allowable under 35 U.S.C. §103(a) over *Tanaka et al* and *Jeacle*. Applicants further submit that claims 2-6 define additional patentable subject matter due to their dependence on claim 1 and therefore are also allowable under 35 U.S.C. §103(a).

Claim 7 was rejected on the basis that it has similar scope to claims 1 and 6, and thus the rejections to claims 1 and 6 have also been applied to claim 7. Claim 7 recites similar limitations to claim 1. In particular, claim 7 recites "simultaneous displaying...a mathematical relation in the form of a graphical representation and in another format being either an algebraic formula or a tabulated set of data which describes the graph or both...wherein displayed information in said another format is substantially simultaneously and correspondingly changed to continually describe the graph as it is manipulated". As there is no teaching or suggestion in *Tanaka* or *Jeacle* of a method in which information which is displayed in a format other than a graphical format is substantially simultaneously and correspondingly changed

to continually describe the graph as it is manipulated, claim 7 is not rendered obvious by *Tanaka* or *Jeacle* either when considered in combination or alone.

Claims 8-12 and 14 were rejected to on the basis that these claims were considered similar in scope to claims 1-5 and 7, and thus the rejections to claims 1 to 5 and 7 have also been applied to claims 8 to 12 and 14.

As to claim 8, claim 8 recites an "apparatus for interactively demonstrating an interrelationship between different representations of a mathematical relation, the apparatus including...a visual display device which simultaneously displays at least two of multiple possible representations of a defined mathematical equation, the multiple possible representations including a graphical representation in the form of a graph, a numerical representation in the form of a table of relation of values, and a symbolic representation in the form of an equation expresses in terms of standard mathematical nomenclature...and wherein the apparatus is responsive to said changing position data to substantially simultaneously and correspondingly update the other displayed representation in accordance with manipulation of the graphical representation".

Neither *Tanaka* nor *Jeacle*, either alone or in combination, teaches or suggests such an element, thus Applicants submit that claim 8 defines patentable subject matter. Furthermore, claims 9-13 depend from and contain all the limitations of claim 8 therein and thus define additional patentable subject matter.

As to claim 14, claim 14 recites "a processor...for updating multiple representations of the mathematical relationship according to a manipulation of a graphical representation". Neither *Tanaka* nor *Jeacle* teaches or suggests such a limitation and thus claim 14 is not rendered obvious thereby. Accordingly, Applicants submit that claim 14 defines patentable subject matter.

Notwithstanding the above remarks, Applicants submit that even if the *Tanaka* and the *Jeacle* references were to teach or suggest all of the claim limitations, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings to support the proposed combination.

Tanaka teaches an apparatus for displaying graphical representations of different designated functional formula so that the graphical representations may be "displayed in comparison with one another" (c.f. abstract). There is no teaching of an apparatus for displaying a graph which is *updated* in accordance with the inputting of different values into a table as described in *Jeacle*. Consequently, one of ordinary skill in the art, when reviewing these references, would not be motivated to combine the teachings of these references as they relate to different applications, and certainly there is no suggestion to support the combination the examiner proposes.

In view of the above remarks, Applicants respectfully submit that the Application is in the condition for allowance.

Date: August 21, 2003

Hewlett-Packard Company
Intellectual Property Administration
P. O. Box 272400
Fort Collins, Colorado 80527-2400

Respectfully submitted,



Wendell J. Jones
Attorney for Applicants
Reg. No.: 45,961
Tel. No.: (650) 857-7453